

Application of Correlation-Gas Chromatography to Problems in Thermochemistry

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Correlation-gas chromatography is proving to be a powerful analytical technique that can be applied to the measurement of vaporization enthalpies and vapor pressures of liquids, both hypothetical (sub-cooled) and/or otherwise. This technique has been applied to the measurement of vaporization enthalpies (and vapor pressures) of the n-alkanes from C₂₁-C₃₈, complex fuels, and tautomeric and isotopically substituted mixtures. The technique of correlation-gas chromatography as applied to these measurements will be discussed and when possible, the results will be compared to existing thermochemical data.